

UNCLASSIFIED

AD 401 562

DEFENSE DOCUMENTATION CENTER

FOR

SCIENTIFIC AND TECHNICAL INFORMATION

CAMERON STATION, ALEXANDRIA, VIRGINIA



UNCLASSIFIED

NOTICE: When government or other drawings, specifications or other data are used for any purpose other than in connection with a definitely related government procurement operation, the U. S. Government thereby incurs no responsibility, nor any obligation whatsoever; and the fact that the Government may have formulated, furnished, or in any way supplied the said drawings, specifications, or other data is not to be regarded by implication or otherwise as in any manner licensing the holder or any other person or corporation, or conveying any rights or permission to manufacture, use or sell any patented invention that may in any way be related thereto.

401 562

(5) 17511

42767

S/185/62/007/010/009/020
D234/D308

STEP
24.3500

AUTHORS: (8) Vyshevs'kyy, V. N., Lyskovych, O. B., Pidsyraylo, M. S.
and Chornyy, Z. P.

TITLE: (6) Investigation of x ray luminescence of scintillators
NaI (Tl)^M

PERIODICAL: (15) Ukrayins'kyy fizichnyy zhurnal, v. 7, # 10, 1962,
pp. 1101-1104

TEXT: Single crystals of NaI(Tl), 2 - 3 cm thick and having a cross-section area of 2 cm², were investigated. The energy distribution graph shows a broad intense band with a maximum near 420 mu and a less intense one near 330 mu. If the activator concentration is smaller than 2.5×10^{-4} moles Tl/mole NaI the total intensity of luminescence is proportional to it. Continuous irradiation for 17 hours decreased the luminescence intensity, which did not return to usual value after 30 hours. The authors explain this by additional scattering of the excitation energy on lattice defects caused irreversibly by irradiation. The authors thank Ya. M. Zakharko for

Card 1/2 SEE S/185/62/007/010/013/020

Investigation of x ray ...

S/185/62/007/010/009/020
D234/D308

discussion. There are 3 figures.

ASSOCIATION: L'vivs'kyy derzhuniversytet im. Iv. Franka (L'viv State University im. Iv. Franko)

SURMITTED: March 13, 1962